

# UPSON Rural Hospital Stabilization Report

November 2018

## Rural Hospital Stabilization Program Upson County Team



#### **Four Major Projects**

- Care Coordination
  - Mobile Integrated Health
  - Warm Springs Medical Center Investment
  - StuderGroup Transitions of Care
- Telemedicine
  - Upson-Lee School System Investment
  - Maternal Fetal Medicine
  - EKGs from the Field
- Geri-Psych
- Medical Student Pipeline
  - Club Med
  - Mercer University Partnership



## Upson. Care Coordination. Budget: \$210,500

Project Aim: Reduce Inappropriate ER Utilization

Need: In 2016, 7 patients had 246 ER visits

**Approach:** At-Risk partnership with Community Ambulance on a Mobile Integrated Health program. Upson pays \$500 per enrollee and a percentage of cost avoidance

**Results:** Reduced Utilization of 7 targeted patients to 11 visits; with about \$500,000 in cost avoidance (reduction in bad debt)



#### **The Initial Seven**

ED Visits										
Pre- Enrollment	Enrollment Date	During Enrollment	% Change	Graduation Date	Post Graduation	% Change				
33	04/12/17	17	-48.48%	11/01/17	2	-93.94%				
35	04/14/17	10	-71.43%	09/26/17	1	-97.14%				
49	04/25/17	15	-69.39%	10/27/17	1	-97.96%				
29	04/12/17	3	-89.66%	09/18/17	6	-79.31%				
30	08/29/17	0	-100.00%	09/18/17	0	-100.00%				
17	08/29/17	0	-100.00%	09/18/17	1	-94.12%				
53	07/07/17	7	-86.79%	09/19/17	0	-100.00%				



### **Expenditure Savings Analysis**

Expenditure Sa	avings Analys	is (1) EMS Lo	yalty Progra	m					
Based on Medicare Rates									
Analysis Dates:	April 1, 2017	7 – Septembe	r 30, 2018						
Number of Patients(2):	5								
	MIH 9		911 Transports to ED						
Category		Base	Avoided	Savings					
Ambulance Charge		\$1,257.00	38	\$47, 766.00					
Ambulance Payment(3)		\$371.00	38	\$14,098.00					
ED Charges		\$2,400.00	163	\$391,200.00					
ED Payment(4)		\$774.00	163	\$126,162.00					
ED Bed Hours(5)		0	630	0					
Total Charge Avoidance				\$438,966.00					
Total Payment Avoidance				\$140,260.00					
Per Patient Enrolled									
Charge Avoidance				\$87,793.20					
Payment Avoidance				\$28,052.00					
Notes:									
1. Comparison based on use for 12 mont	hs prior to enrollr	ment vs. 12 month	s after MIH grad	uation					
2. Patients with data 12 months before and after graduation									
3. Average Medicare payment received by Community Ambulance									
4. Base expenditures derived by AHRQ reports									
5. Based on mean LOS for ED visit. Source document is US National Library of Medicine, National Institutes of Health.									



### **Expenditure Savings Analysis**

#### (5) RESULTS

A total of 1,689 8-hour shifts were analyzed during the study period. The mean number of patient visits per 8-hour shift was 54.2, and the mean LOS was 232 minutes for all patients, whether they were admitted, discharged, or transferred. Hospital occupancy was high during the study period with a mean of 94.9% and a range of 67.6% and 112.1%. The measure may exceed 100% since the numerator is the sum of patients physically in beds at midnight plus the number of patients discharged in the previous 24 hours. We could not demonstrate a nonlinear effect of occupancy on LOS after analyzing residuals and considering a quadratic term for occupancy in the models. The residual plots looked good and showed no signs of heteroscedasticity. The quadratic term was not significant, and the fit of the model by AIC was not improved significantly when it was added. The mean number of elective surgical admissions was 24 per 24-hour period. As expected, shift 2 was the busiest in terms of numbers of discharged patients, admissions, ICU admissions, and resuscitation cases. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3415804/



#### **Cost Avoidance**

SAMPLE COST AVOIDANCE FORMULA	
(Total ER Visits in 12 months prior to enrollment x ER charge per visit) = Total Pre-Enrollment ER Charges	\$350,400.00
(Total ER Visits in 12 months post graduation x ER charge per visit) = Total Post-Graduation ER Charges	\$122,400.00
Total Pre- Enrollment ER charges- Total Post-graduation ER charges= Total ER Charge Avoidance	\$228,000.00
Total ER Charge Avoidance X .139 = Compensation Due to Community Ambulance MIH Program	\$31,692.00









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